

Claims

Sub F4
 1) A monoclonal antibody, characterized by an exchange of cysteine for another polar amino acid at position H100A of the OKT3 antibody known under this name.

Sub C4
 2) The monoclonal antibody, characterized in that the polar amino acid is serine.

3) The monoclonal antibody according to claim 1 or 2, characterized in that it includes the sequence indicated in figure 2.

Sub F5
 4) A method for the production of the monoclonal antibody according to any one of claims 1 to 3, characterized by the steps of:

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- a) obtainment of mRNA from freshly subcloned hybridoma cells of OKT3 and transcription into cDNA,
 - b) amplification of the DNA coding for the variable domains of the light and heavy chains by means of PCR using suitable primers,
 - c) cloning of the DNA obtained in b) into a vector adapted for site-specific mutagenesis as well as introduction of the desired mutation using suitable primers,
 - d) insertion of the mutated DNA obtained in c) in an expression vector and expression in a suitable expression system.

Sub D10
 5) The method according to claim 4, wherein the primers used in step b) are Bi5, Bi8, Bi4 and Bi3f.

Sub C5
 6) The method according to claim 4 or 5, wherein the vector used in step c) is pCR-Skript SK(+).

7) The method according to any one of claims 4 to 6, wherein the primer SK1 5'-GTAGTCAAGGCTGTAATGATCATC is used in step c).

8) The method according to any one of claims 4 to 7, wherein the expression vector used in step d) is pHOG21.

9) The method according to any one of claims 4 to 8, wherein the expression takes place in XL1-Blue *E. coli* cells.

10) Use of the monoclonal antibody according to any one of claims 1 to 3 for reducing or eliminating a transplant rejection by an organ transplant recipient.

11) Use of the monoclonal antibody according to any one of claims 1 to 3 for tumor diagnosis or tumor treatment.

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C6

Add
76

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Sub
C5
could